


Future Directions of the Air Program

Where do we go from here?



A printable version of the graphics displayed on the
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**Future
Directions
of the
Air Program**

Where do we go from here?

Air Futures

**email questions to:
askapti@epa.gov**

**please put in the subject line:
Air Futures**

**questions will be accepted until
November 17, 2002**

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Since 1970

- Emissions of six key air pollutants reduced nearly 30%

Since 1970


- U.S. population up more than 30%
- Energy use up 45%
- Vehicle miles traveled up 145%
- Gross Domestic Product up 160%
- Air quality in cities is better

Air Quality Challenges

- Fine particles
- Ozone
- Other NAAQS
 - Coarse particles
 - Carbon monoxide
- Air toxics
- Global climate change

Lessons Learned


- No single tool to solve all problems
- Example tools
 - Performance standards
 - Non-regulatory voluntary programs
 - Market-based cap and trade programs



EPA is working on national legislation to address local air quality problems

-Clear Skies Initiative

- reduce SO_2 , NO_x , mercury
- from power generation

- 
- **Remaining challenges may require different approaches**
 - **EPA wants to work with state, local and tribal governments to develop cost-effective tools**

Questions to Consider

- What tools are needed?
- What staff training is needed?
- How do we allocate resources?
- How should we allocate responsibilities and discretion?

Over the Last 10 Years State and Local Agencies have

- Put into place nearly 3000 State Plan revisions
- Brought over 160 areas into attainment with federal air quality standards, improving air quality for 45 million people
- Reduced air toxic emissions by 2.2 million tons
- Issued over 30,000 operating permits to industrial facilities

Resources and Priorities

- Virtually every State feeling tight budget limitations
- Trying to match priorities with limited resources
- Federal priorities may not match State's priorities
- Grant commitments are not matched by grant dollars

Opportunities for the Future

- What air quality management tools will we need?
 - analytical? statutory?
- What will be the roles of the Federal and State governments and how will they change?
- How will we assess priorities?
- How will we match our limited resources to those priorities?

Overview of Briefing

- Progress to date
- View of next 10 years
- Changing roles
- Common themes and issues
- Work in progress
- Transition steps

Progress Since 1970

- 25 million more people breathing clean air
- 2.2 million tons/yr of toxics removed
- Better understanding of risk
- Better understanding of regional nature of pollution
- Reduced emissions with significant growth

As the 1990s began.....



Air Quality Issues - 1990

- No acid rain program
- No reformulated gasoline, Tier I or Tier II
- No stratospheric ozone protection program
- Only regulated 7 air toxics
- 117 million people living in counties violating air quality standards
- Radon second leading cause of lung cancer
- Limited efforts on energy conservation or regional haze
- Up to 90% of mercury in water bodies came from air deposition

In the year 2000

- 50% reduction in the number of counties failing to meet a NAAQS
- Emissions of 188 toxic pollutants cut by one-third
- PBT's, like mercury and dioxin cut 90-95%
- Acid Rain program cut SO₂ emissions from 16 million tons in 1990 to 11.2 million tons in 2000

New Directions in the 1990s

- Regional & community-based initiatives
- Information & accountability
- New standards for fine particles & 8-hour ozone
- Market-based trading
- Benefits better characterized

Roles in the 1990s: EPA Regions

- Reviewing 2800 SIP revisions
- Outreach on radon programs
- Establishing tribal programs
- Outreach on indoor air
- Asthma/children's health programs
- Environmental justice
- Reviewing NSR/Title 5/Acid Rain permits
- MACT delegation
- Work through OTAG, FACA, PPA's/PPG's & GPRA
- Reviewing State permit programs
- Tracking sanction clocks

Roles in 1990s: EPA Headquarters

- National Air Quality Standards
- Motor vehicles/fuels
- Acid Rain program
- Stratospheric Ozone rules/programs
- Indoor Air/Radon outreach
- Global warming/energy efficiency programs (Energy Star, etc.)
- Air toxics standards
- Rules/guidance for Title V and NSR permit programs
- SIP guidance

As we begin to look at 8-hour ozone and PM-2.5



The Immediate Future

- 425 counties (143 million people) will have monitored violations of at least one NAAQS
- Asthma concerns increase: 17 million Americans, including one in 13 school aged children, have asthma
- Regional nature of air pollution problem calls for regional strategies

Where Might We Be in 2010?

- Implementation of key national programs
 - Tier II for vehicles and fuels
 - Heavy duty diesel rule
 - Clear Skies Initiative
- VMT will continue to grow, but cars, light-duty trucks and SUVs will be 99% cleaner than those purchased in 1970
- Widespread nonattainment not likely a problem
- Nitrogen, sulfur & mercury deposition decreasing
- Improvements expected to continue to 2020 & beyond

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Our World is Changing

- We are completing CAA requirements
- Expectations & nature of stakeholders are changing
- Emerging challenges
 - Market-based/innovative approaches
 - Alternatives to command & control
 - Regional planning approaches
 - Community-based programs
 - Agriculture/forestry issues
 - Sector-based approaches
 - International transport

Regional Roles

- Decreasing activities
 - Title 5 permits
 - NSR permits
- Increasing activities
 - Regional planning organizations
 - Indoor air/radon work
 - Tribal programs
 - Homeland security/response
 - Issues unique to each Region
 - GPRA-Performance investment strategies
 - Emerging issues
 - Targeted outreach programs
 - Community-level risk assessments
- Activities remaining constant
 - Review SIP revisions

Headquarters Roles

- Decreasing activities
 - National rules (toxics, mobile, etc.)
 - Managing support for national programs
- Increasing activities
 - Innovative and voluntary programs
 - Emerging issues, revisions to Clean Air Act
 - Homeland security/response
 - Performance measures
 - Regional/community-based programs

Common Themes for the Future

- Improve existing programs
- Be friendly to innovation
- More focus on localized problems
 - Develop tools to support local & regional problem-solving
 - Examples:
 - Nitrogen deposition in Chesapeake Bay
 - Shenandoah haze
 - Fine particles in urban areas
- Work collaboratively to develop national & regional measures
- Improve information systems & accountability

Specific Actions Under Way

- ✓ 1. Expanding AQI
(Fine particles)
- ✓ 2. Ozone Flex
- ✓ 3. Local innovative initiatives
(e.g., Charlotte, Cleveland)
- ✓ 4. Innovative approaches conference
- ✓ 5. Data Warehouse
- ✓ 6. Redirecting resources
- ✓ 7. Outreach on Air Futures ---seeking feedback

Turning Dialogue Into Action

- This is a work in progress
- Agree on common themes and directions
- Identify tangible pilots and programs to jointly pursue
- Ensure ongoing communication among stakeholders
 - Continue to foster partnerships
 - EPA HQ-regional steering committee
 - Region-state-local-tribal communication

What Do **YOU** Think?

- Does this match your view of the future?
- What are the implications for your program?
- What are the obstacles and opportunities?
- How will we know we are making progress?
- What measures should we use?
- What are the opportunities for presenting this to stakeholders and getting their feedback?

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may be viewed at this website:

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